A Framework for a Root Cause Analysis and Action Plan

in Response to a Sentinel Event

Level of Analysis		Questions	Findings	Root cause?	Ask "Why?"	Take action?
What happened?	Sentinel event	What are the details of the event? (Brief description)				
		When did the event occur? (Date, day of week, time)				
		What area/service was impacted?				
Why did it happen? ---- What were the most proximate factors? (Typically "special cause" variations)	The process or activity in which the event occurred	What are the steps in the process, as designed? (A flow diagram may be helpful here)				
		What steps were involved in (contributed to) the event?				
	Human factors	What human factors were relevant to the outcome?				
	Equipment factors	How did the equipment performance affect the outcome?				
	Controllable environmental factors	What factors directly affected the outcome?				
	Uncontrollable external factors	Are they truly beyond the organization's control?				
	Other	Are there any other factors that have directly influenced this outcome?				
		What other areas or services are impacted?				

This three-page template is provided as an aid in organizing the steps in a root cause analysis. Not all possibilities and questions will apply in every case; and there may be others that will emerge in the course of the analysis. However, all possibilities and questions should be fully considered in your quest for "root causes" and risk reduction.

As an aid to avoiding loose ends, the three columns on the right are provided to be checked off for later reference.

A Root Cause should be answered, Yes or No, for each finding. A root cause is typically a finding related to a process or system that has a potential for redesign to reduce risk. If a particular finding that is relevant to the event is not a root cause, be sure that it is addressed later in the analysis with a "Why?" question. Each finding that is identified as a root cause should be considered for an action and addressed in the action plan.

Ask "Why?" should be checked off whenever it is reasonable to ask why a particular finding occurred (or didn't occur when it should have) to drill down further. Each item checked in this column should be addressed later in the analysis with a "Why?" question. It is expected that many findings that are not identified as root causes will have check marks in this column. Also, items that are identified as root causes will often be checked in this column, since many root causes themselves have roots.

Take action? should be checked for any finding that can reasonably be considered for a risk reduction strategy. Each item checked in this column will be [illegible]

APPENDIX A

Framework for a Root Cause Analysis (continued)

Level of Analysis		Questions	Findings	Root cause?	Ask "Why?"	Take action?
Why did that happen? What systems and processes underlie those proximate factors? (Common cause variation here may lead to special cause variation in dependent processes.)	Human resource issues	To what degree are staff properly qualified and currently competent for their responsibilities?				
		How did actual staffing compare with ideal levels?				
		What are the plans for dealing with contingencies that would tend to reduce effective staffing levels?				
		To what degree is staff performance in the operant process(es) addressed?				
		How can orientation & in-service training be improved?				
	Information management issues	To what degree is all necessary information available when needed? accurate? complete? unambiguous?				
		To what degree is communication among participants adequate?				
	Environmental management issues	To what degree was the physical environment appropriate for the processes being carried out?				
		What systems are in place to identify environmental risks?				
		What emergency and failure-mode responses have been planned and tested?				
	Leadership issues: Corporate culture	To what degree is the culture conducive to risk identification and reduction?				
	Encouragement of communication	What are the barriers to communication of potential risk factors?				
	Clear communication of priorities	To what degree is the prevention of adverse outcomes communicated as a high priority? How?				
	Uncontrollable factors	What can be done to protect against the effects of these uncontrollable factors?				

Framework for an Action Plan in Response to a Sentinel Event

	Risk Reduction Strategies	Measures of Effectiveness
For each of the findings identified in the analysis as needing an action, indicate the planned action, expected implementation date, and associated measure of effectiveness, OR . . .	Action Item #1:	Measure:
If, after consideration of such a finding, a decision is made not to implement an associated risk reduction strategy, indicate the rationale for not taking action at this time.	Action Item #2:	Measure:
Check to be sure that the selected measure will provide data that will permit assessment of the effectiveness of the action.	Action Item #3:	Measure:
Consider whether pilot testing of a planned improvement should be conducted.	Action Item #4:	Measure:
Improvements to reduce risk should ultimately be implemented in all areas where applicable, not just where the event occurred. Identify where the improvements will be implemented.	Action Item #5:	Measure:
	Action Item #6:	Measure:
	Action Item #7:	Measure:
	Action Item #8:	Measure:

Cite any books or journal articles that were considered in developing this analysis and action plan: